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The only other case of the kind which I have ever heard of, and the only one known to the gentleman whose case is recorded above, is that of a distant relative of his, who is afflicted in a similar way. On one occasion, when visiting some friends who thought his dread of strawberries was largely or wholly a matter of the imagination, the hostess prepared some strawberry shrub, which was so disguised with other flavors as to conceal the real nature of the beverage. Of this he drank a moderate amount without knowing what it was; but he was soon taken with the worst symptoms of strawberry poisoning, his illness speedily becoming so serious that his life for a time was despaired of. The two cases here recorded appear to be essentially the same, so far as the effects of the strawberry poisoning are concerned, the only important difference being that the susceptibility to the poison was not developed in the first case until the person in question was fourteen years of age, while in the other it seems to have been congenital. Cornell University. A. N. PRENTISS.

# CURRENT LITERATURE.

# The Prothallium of Equisetum.1

In this monograph Dr. Buchtien gives, in the first ten pages, a very full history of the special studies of Equisetum, from Dillenius in 1717 t. Sadebeck in 1879. Almost all the earlier observers, as is well known, failed to understand the relations of the reproductive parts, and all the later ones have been troubled by inability to cultivate the prothallia. Buchtien gives a detailed description of his methods of culture. The key to his success seems to be in complete sterilization, by wellknown methods, of the substrata used for cultures. The remainder of the paper describes fully the spore, its germination, development of the prothallium and its trichomes, the development of the spermatozoids and the formation of the young plantlet (asexual stage). Into the details of this developmental history we have not space to enter. The paper is a model of completeness and logical arrangement, and is an important one for laboratory libraries.

# Muscologia Gallica.<sup>2</sup>

This important work has reached its sixth part, which almost completes the genus Orthotrichum. This part and a portion of the preceding and following, embracing all European species of the genus Orthotrichum, has been specially elaborated by Dr. Venturi. He shows a commendable recognition of the variability of the species of this genus, and many nominal species are reduced. Dr. Venturi's work is not only of <sup>1</sup> Entwicklungsgeschichte des Prothallium von Equisetum. Von Dr. Otto Buchtien. .(Bibliotheca botanica, heft 8) 4°, pp. 49, plates vi. Cassel: Theodor Fischer, 1837. Price, <sup>2</sup>Muscologia Gallica, descriptions et figures des Mousses de France et des contrées voisines. By Th. Husnot. 6e livraison. Royal 8°, pp. 161-192, plates xlv-lii. Published by the author, Cahan, par Athis, Orne, France. Each livraison, 5 francs.

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interest to European bryologists, but is of much value to Americans, as it contains critical notes upon a number of our species. In fact, the whole work is worthy the patronage of American bryologists. The plates are good and the work is remarkably cheap.

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#### Das Botanische Practicum."

No book ever came nearer to filling a long-felt want than this hand-book, which was issued only three years ago, and of which two English translations have lately been published. The fact that a revision has been so soon called for has been chiefly due to the demand for the book and the rapid advance in microscopical technique. This edition, therefore, has been completely re-elaborated; so completely that a detailed comparison with the first can not be made. A few of the chief changes may be noted. The number of "tasks" has been reduced from thirty-four to thirty-two, and the number of specimens studied has also been reduced somewhat, in order to give room for the more complete exposition of microscopical technique. Room for this purpose has also been obtained by increasing the size and number of the pages, and it has been the author's aim to develop the microtechnical portions rather than the anatomical. In this respect, therefore, the book is much stronger than before. But microtechnique, without reference to its application in scientific research, gets no countenance from the author. Important changes are also made in the chapters on the fibro-vascular system and on the bacteria, to which alone over forty pages are given. The bringing of the references from the end of the chapters to foot-notes is a great convenience. Not only is the information which one most wants in the book, but it is rendered thoroughly accessible by the elaborate indexes. These, already good in the first edition, have been considerably enlarged, and two new ones added. There are now, besides a very full table of contents and a list of illustrations, six indexes, covering 87 pages. The first gives a list of the plants used, indicating the parts needed and the desired condition, whether fresh or alcoholic; second, a list of the plants used arranged according to the times at which they may be obtained, a most useful scheme for the collector; third, a list of instruments and utensils; fourth, a descriptive list of reagents, stains, imbedding media, etc., with recipes and directions for preparing them; fifth, a list of necessary reagents and stains; sixth, a general index to the whole work. It 18, unquestionably, the best indexed book we have ever seen. We commend Dr. Strasburger's example to his countrymen as one worthy of imitation. A number of new cuts also appear in the text of the same

 <sup>a</sup> Das botanische Practicum; Anleitung zum Selbststudium der mikroskopischen Botanik. für Anfänger und Geübtere. Zugleich ein Handbuch der mikroskopischen Technik. Mit 193 Holzschnitten. Von Dr. Eduard Strasburger. Zweite umgearbeitete Auflage, Royal 8°, pp. xxxvi, 685. Jena: Gustav Fischer, 1887. Price, 16 marks.

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not be too highly commended. Certainly, it is indispensable to all botanists who use the microscope, and we fancy even zoologists will find it useful.

### The Fern Allies.4

Supplementary to "Synopsis Filicum," and by the junior author of its second edition, appears this manual, and for the first time the lower pteridophytes of the world are described together in one volume. The general arrangement follows much the pattern of the familiar "Synopsis Filicum," but the type is much clearer and the quality of paper used much heavier, so that in mechanical execution the work is an improvement on its predecessor. At the head of each genus is a "clavis" (why not "key," since the descriptions are in English?), but as its ultimate divisions refer to groups containing sometimes twenty species it is not as serviceable as it might have been made. The species are classified in four orders and eleven genera, as follows: EQUISERACE.E, 20 species, all belonging to Equisetum; LYCOPODIACE.E, 98 species, distributed among Phylloglossum 1, Lycopodium 94, Tmesipteris 1, Psilotum 2; SELAGINELLA-CEÆ, 383 species, divided between Selaginella 334, and Isoetes 49; and RHIZOCARPE.E. 64 species, distributed among Salvinia 13, Azolla 5, Marsilia 40, and Pilularia 6; or in all 565 species, against probably 3,000 ferns, since it is stated in the preface to this work that over 700 have been described since the last issue of "Synopsis Filicum" in 1874, and this contained 2,235.

Looking at some of the genera in more detail, we find the twentyfive species of Equisetum of Milde's exhaustive monograph reduced to twenty here. E littorale is doubtfully credited to our flora, notwithstanding the fact that, in addition to the Canadian locality mentioned by Milde, we have Pringle's station in Vermont near Lake Champlain, and Wibbe's discovery of the same near Oswego, N.Y. E. telmateia appears under the name of E. maximum Lam., which is an error according to Milde, who examined Lamark's original specimen.

Lycopodium sabinæfolium appears as a variety under L. alpinum, which would seem unnecessary unless both were made varieties of L. complanatum, from which they have undoubtedly sprung. The substitution of L. obscurum for L. dendroideum is of doubtful propriety.

Selaginella tortipila is included under S. rupestris where it doubtless belongs, and S. Ludoviciana, from Alabama and Louisiana, scarcely distinct from S. apus, is recognized as a good species, so that the total number of our species remains as before.

The most glaring omission with reference to American species is, that of two of Engelmann's species of Isoetes published in his valuable monograph in 1882. This work was evidently unknown to the author, as he fails to mention it with Engelmann's earlier papers in the sum-Hand-book of the Fern Allies. By J. G. Baker, F. R. S., F. L. S. 8°, pp. 159. London: George Bell & Sons, 1887.

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mary of the literature of the genus. I. Suksdorfii appears as a new species from Washington Territory, said to be easily recognized by its trilobed rootstock.

The U. S. species of Marsilia are reduced to four, M. tenuifolia strangely kept distinct, while M. uncinata and M. mucronata are made varieties of M vestita Extended study of large suites of the American forms has led us to different results<sup>5</sup> The error of Al. Braun (in Berl. Monatsbericht) in copying Engelmann's M macropoda as macropus is here repeated, the original description evidently not being consulted.

Salvinia natans is not credited to America, yet its existence in Missouri is an established fact. Notwithstanding these omissions, the work is a valuable addition to the literature of the pteridophytes.

LUCIEN M. UNDERWOOD.

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## NOTES AND NEWS.

MR. W. BAKER, formerly a member of the Kew staff, has been appointed curator of the Oxford Botanic Garden.

COUNT H. VON SOLMS-LAUBACH, professor of botany at Göttingen, has accepted the position of director of the botanical garden at Berlin.

PROF. L. H. BAILEY, JR., of the Michigan Agricultural College, is delivering a course of lectures at Cornell University on horticulture.

Two NEW GENERA of Ascomycetes are published in Journal de Botanique (Nov. 15) by M. Ph. Van Tieghem, under the names Oleina and Podocapsa.

ERRATUM.-After the review of Rees and Fisch's monograph on Elaphomyces, vol. xii, p. 255, append the initials W. T. The review was contributed at the editors' request.

DR. H. H. RUSBY has distributed his paper on the cultivation of Cinchona in Bolivia as a reprint from the Pharmaceutical Record. It was read at the last meeting of the A. A. A. S.

AN ARTICLE on the mycodomata of papilionaceous roots by Dr. A. N. Lundström in the last number of Botaniska Notiser is accompanied with a plate illustrating the bacterioid bodies found in the tubercles.

AN INTERESTING account of the morphology and biology of the Uredineæ by P. Dietel is being published in the successive numbers of the Botanisches Centralblatt, in which many American species are considered.

THE West American Scientist enters upon its fourth volume with continued assurance of success. Its editor, Mr. C. R. Orcutt, is doing a good work in keeping alive an interest in natural history subjects on the Pacific slope.

PROFESSOR L. VON CIENKOWSKI, of the Russian University of Charkow, well known by his studies on low forms of animal and plant life, and particularly by his memoir on the "Morphologie der Bacterien," died October 7, at Leipzig.

\*Cf. Bulletin Torrey Bot. Club, May, 1887.

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